Hydrogen Peroxide and Bleach

The mixture of hydrogen peroxide and bleach creates oxygen gas, salt (sodium chloride) and water. The bleach must contain sodium hypochlorite for this experiment to work. The solutions do not need to be concentrated to get a quick reaction. You will need 3 percent hydrogen peroxide, approximately 6 percent household bleach and a beaker. Pour 56 grams (2 ounces) of bleach into the beaker and the equivalent of hydrogen peroxide. Once the two are mixed, the reaction will occur quickly, producing bubbling.

NaOCL+H2O2 ---O2+H20 +NaCL

Bleach +Peroxide –oxygen and salt water

Pour 2 inches of peroxide into test tube. Use a pipette to drop bleach into peroxide. Use a glowing splint and place in mouth of test tube. It will relight if enough oxygen was produced.

Baking Soda and Vinegar Reaction

Acetic Acid (vinegar) + Baking Soda == Sodium Acetate +Carbon Dioxide + Water

CH3COOH + NaHCO3 = CH3COONa + CO2 + H2O

1. Pour 2 inches of vinegar in test tube. Use w splint to scoop some baking soda into the vinegar. Place a lit splint in the mouth of the tube. It may even go out before entering the mouth if enough carbon dioxide is being generated.

NaOCl+H2O2⟶O2+H2O+NaCl